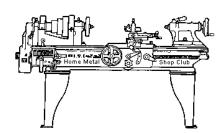


January 2023

Newsletter

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http://www.homemetalshopclub.org/

The Home Metal Shop Club has brought together metal workers from all over the Southeast Texas area since its founding by John Korman in 1996.

Our members' interests include Model Engineering, Casting, Blacksmithing, Gunsmithing, Sheet Metal Fabrication, Robotics, CNC, Welding, Metal Art, and others. Members enjoy getting together and talking about their craft and shops. Shops range from full machine shops to those limited to a bench vise and hacksaw.

If you like to make things, run metal working machines, or just talk about tools, this is your place. Meetings generally consist of *general announcements*, an *extended presentation* with Q&A, a *safety moment*, *show and tell* where attendees share their work and experiences, and *problems and solutions* where attendees can get answers to their questions or describe how they approached a problem. The meeting ends with *free discussion* and a *novice group* activity, where metal working techniques are demonstrated on a small lathe, grinders, and other metal shop equipment.

President	Vice President	Secretary	Treasurer	Librarian
Vance Burns	Ray Thompson	Joe Sybille	Gary Toll	<i>Ray Thompson</i>
Webmaster/Editor	Photographer	CNC SIG	Casting SIG	Novice SIG
Dick Kostelnicek	Vacant	Martin Kennedy	Vacant	John Cooper

This newsletter is available as an electronic subscription from the front page of our <u>website</u>. We currently have over 1027 subscribers located all over the world.

About the Upcoming 11 February 2023 Meeting

The next general meeting will be held on 11 February 2023 at 1:00 P. M. on-line at Zoom.us. Log-in credentials are as follows: Meeting ID= 844 2217 5779 Passcode= 444680

General Announcements

<u>Videos of recent meetings</u> can be viewed on the HMSC website.

The HMSC has a large library of metal shop related books and videos available for members to check out at each meeting. These books can be quite costly and are not usually available at local public libraries. Access to the library is one of the many benefits of club membership. The club has funds to purchase new books for the library. If you have suggestions, contact the Librarian Ray Thompson.

We need more articles for the monthly newsletter! If you would like to write an article, or would like to discuss writing an article, please contact the <u>Webmaster Dick Kostelnicek</u>. Think about your last project. Was it a success, with perhaps a few 'uh ohs' along the way? If so, others would like to read about it. And, as a reward for providing an article, you'll receive a free year's membership the next renewal cycle!

Ideas for programs at our monthly meeting are always welcomed. If you have an idea for a meeting topic, or if you know someone that could make a presentation, please contact <u>Vice-President Ray Thompson</u>.

Members are requested to submit to the club secretary the name, address, telephone number, and website address, if any, of any metal or other material stock supplier with whom the member has had any favorable dealings. A listing of the suppliers will appear on the homepage of the club website. Suppliers will be added from time to time as appropriate.

The club is looking for a member to serve as webmaster. After over ten years of service, our current webmaster would like to pass the webmaster torch to a successor.

It is with regret the club announces the passing of longtime member Jan Rowland. Jan served as editor for several years then club photographer for many years. He is survived by his wife of fifty-three years, Hanne.

Recap of the 14 January 2023 General Meeting

By Joe Sybille

Fourteen participants attended the 1:00 P.M. meeting. There were seven on-line participants and seven in-person. President Vance Burns led the meeting. See photo at far right.







Presentation



Club member John Cooper gave a presentation on his recent visit to the Museum of Aviation at Warner Robins Air Force Base, about 100 south of Atlanta, Georgia.

Cooper shared and described pictures of aircraft depicting the evolution of military planes from WWII to the present. Some airplanes in the museum were originally built for civilian use, but were converted to military use. Sample pictures of the aircraft shown during the presentation today are depicted below.













Show and Tell

Rich Pichler showed end mills and a boring head purchased at a garage sale. See photos below.





Bill Swann demonstrated the concept of Lenz's Law. A set of 3/8" diameter magnets dropped through one end of a five foot length of half inch diameter copper pipe takes longer to fall through than one would expect. This delayed free fall of the magnets is caused by the opposition of the induced magnetic field in the pipe created by the magnets. See photo at right.

Richard Douglas showed an elk silhouette plasma cut from quarter inch thick carbon steel. Also, he showed a jack he made to lift the hitch on his trailer. See photos below.









Chris Kelley demonstrated the workings of a 6-axis robotic machine tool. Depending on the task at hand, the machine could be used for welding, water-jet cutting, retrieving items, or parts placement. See photos below.





Safety Moment

Several safety videos were shown. One depicted a person losing control of and falling from a motorcycle while swerving to avoid a bus. Fortunately for the rider, the helmet worn prevented a lifethreatening injury, as the rider's head landed in the path of the rear wheels on one side of the bus.

Another video depicted a worker felling a tall tree. As the tree trunk fell, it struck the platform on which the worker stood. In turn, the now unstable platform caused the worker to flip head over heels, likely resulting in an injury.

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Another video depicted a worker struck and injured by boxes on a moving conveyor belt. The worker misjudged the speed at which the conveyor moved the boxes.

Another video depicted a fatal injury of a worker when his clothing became entangled in a grain grinding machine. The worker wore loose fitting clothing, an unsafe practice when working around rotating machinery.

Problems and Solutions

A participant had problems mating a new chuck adapter plate with a recently acquired dividing head. Thread pitch and size on both items were believed to be the same, yet the chuck would not screw onto the dividing head. Several suggestions were offered.

Another participant sought recommendations on the best way to insulate a 25'x60' metal building to house his shop. Several suggestions were offered.